

CURRENT SENSE SHUNT RESISTOR CIRCUIT

ABSTRACT OF THE DISCLOSURE

Current through a wire is sensed with a shunt resistor and a sense resistor in a current divider circuit. The values of the shunt resistor and sense resistor are related to provide a specified gain ratio to increase a dynamic range of current measurement. The sense resistor is a trimmable resistor, the configuration of which can be discerned from a look-up table based on a level of precision needed for current measurement. The two resistors can also be related by thermal coefficients to improve linearity of current measurements.